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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,119	02/06/2002	Feniosky Pena-Mora	MIT-086AUS	5759

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EXAMINER
STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	10/068,119	PENA-MORA ET AL.
	Examiner	Art Unit	
	Thomas H. Stevens	2123	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12 April 2002_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-22_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _17-22_ is/are allowed.

6)☒ Claim(s) _1-15_ is/are rejected.

7)☒ Claim(s) _16_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _03/05/2002_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-22 were examined.

Specification

2.   The specification is objected to by which the following element number appear to

be missing:

- Figure 1: elements 14, 18, 20, 22, 26,28, 30, 34,38,60

- Figure 3: elements 86,88,90,92 42

- Figure 7: element 330

3.   The application number on pages 11 and 25, lines 3 and 20, respectively, should

be filled in.

4.   Page 12, line 11, after the work "value", there's a large space with two periods

within the sentence.

Claim Interpretation

5.   Office personnel are to give claims their **"broadest reasonable interpretation"**

in light of the supporting disclosure. *In re Morris,* 127 F.3d 1048, 1054-55, 44 USPQ2d

1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited

in the claim are not read into the claim. *In re Prater,* 415 F.2d 1393, 1404-05, 162

USPQ 541, 550-551(CCPA 1969). See *also *In re Zletz,* 893 F.2d 319, 321-22, 13

USPQ2d 1320, 1322(Fed. Cir. 1989) ("During patent examination the pending claims

must be interpreted as broadly as their terms reasonably allow") .... The reason is

simply that during patent prosecution when claims can be amended, ties should be

recognized, scope and breadth of language explored, and clarification imposed .... An

essential purpose of patent examination is to fashion claims that are precise, clear,

correct, and unambiguous. Only in this way can uncertainties of claim scope be

removed, as much as possible, during the administrative process. The Office equates a

list and a plan since a plan encompasses a list.

Claim Objection

6.   Claim 16 is objected to since the limitation lacks patentable weight.

Claim Rejections - 35 USC § 103

7.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.

2.   Ascertaining the differences between the prior art and the claims at issue.

3.   Resolving the level of ordinary skill in the pertinent art.

4.   Considering objective evidence present in the application indicating

obviousness or nonobviousness.

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1-5,8-10, 13,14 are rejected under 35 U.S.C. 103(a) as obvious by

Allweyer et al., "Model-Based Re-Engineering in the European Construction Industry"

(1996) (hereafter Allweyer) in view of Mora et al., "Dynamic Planning and Control Methodology for Design/Build Fast-Track Construction Projects" (Jan/Feb 2001) (hereafter Mora). Allweyer and Mora are analogous art because they both teach construction modeling.

Therefore, it would have been obvious to one having ordinary skill in the art atthe time the invention was made to utilize pre-structured model of Allweyer in the dynamic planning methodology of Mora because Allweyer teaches an efficient way to reduce the risks of BPR projects and to increase the quality of the results (Allweyer: pg.5, "Reference Models" section, 2nd paragraph) and for the faster development of new process structures, and software-specific models for matching them against the new process model, and selecting and customizing a software system that will support new processes (Allweyer: pg. 7, lines 5-7).

Claim 1. A dynamic planning (Mora: abstract) method comprising: generating a project list (Mora: claim interpretation and abstract: line 6) with a plurality of activities; selecting two or more activities from a plurality of activities within a project plan (Mora: abstract, line 6); generating a time precedence relationship between the selected activities structuring the one or more activities (Mora: pg. 2, "System Dynamic Modeling" section, lines 5-9) with an activity pre-structured (Allweyer: pg.6, 2nd paragraph) process model; structuring the time precedence relationships with an activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model associating an activity characteristics value (Mora: pg. 2, "System Dynamic Modeling" section, lines 5-9) with the activity pre-

structured (Allweyer: pg.6, 2nd paragraph) process model; associating an activity

relationship value with the activity relationship pre-structured (Allweyer: pg.6, 2nd

paragraph) model to provide a dynamic planning (Mora: abstract) method (DPM) project

planning (Mora: abstract, line 6) model; and dynamically adjusting the DPM project plan

ning (Mora: abstract, line 6) model to provide a DPM project plan (Mora: abstract, line

6).

Claim 2. The method of claim 1, wherein associating an activity characteristics value

with the activity pre-structured (Allweyer: pg.6, 2nd paragraph) process model

comprises: providing a user-defined activity reliability (Mora: pg. 12, right column, 5th

paragraph) value for each of the one or more activities; and associating the activity

reliability value (Mora: pg. 12, right column, 5th paragraph) with the activity relationship

pre- structured model.

Claim 3. The method of claim 1, wherein associating an activity characteristics value

with the activity pre-structured (Allweyer: pg.6, 2nd paragraph) process model

comprises: providing a user a user-defined production type value (Mora: pg. 2,

"Methodology" section, last sentence of 1st paragraph--2nd paragraph, lines 1-5)) for

each of the one or more activities; associating the production type (Mora: pg. 2, "System

Dynamic Modeling", pgs. 6-10) value with the activity pre-structured (Allweyer: pg.6, 2nd

paragraph) process model.

Claim 4. The method of claim 1, wherein associating an activity relationship value with

the activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model

comprises: providing a user-defined time precedence relationship between the one or more activities (Mora: pg. 8, Sensitivity Curves figure 14 examples of perceived and real progress); associating the time precedence relationship with the activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model.

Claim 5. The method of claim 1, wherein associating an activity relationship value with the activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model comprises: providing a user-defined sensitivity value (Mora: pg. 3, left column, 2nd paragraph; and pg.2, "System Dynamics Modeling" line 5) for the time precedence relationship; associating the sensitivity value (Mora: pg. 3, left column, 2nd paragraph; and pg.2, "System Dynamics Modeling" line 5) with the activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model.

Claim 8. The method of claim 1, wherein dynamically adjusting the DPM project planning (Mora: abstract, line 6) model to provide a DPM project plan (Mora: abstract, line 6) comprises: automatically generating one or more reliability buffers (Mora: pg.3, left column, 1st paragraph, 2nd line with pg.7 left column, lines 1-3) in association with respective ones of the one or more activities to, wherein each reliability buffer has a duration value (Mora: abstract: lines 9-10), an upstream time precedence relationship between the reliability buffer and an upstream activity, and a downstream time precedence relationship between the reliability buffer (Mora: pg.3, left column, 1st paragraph, 2nd line with pg.7 left column, lines 1-3) a downstream activity (sections discusses the upstream/downstream with buffer relationship: Mora: pg. 8, left column

2nd and 3rd paragraphs to right column, lines 1-2), to provide the DPM project plan

(Mora: abstract, line 6).

Claim 9. The method of claim 8, wherein the downstream time precedence relationship

is finish to start with no lag or lead ("lag becomes the buffer", pg.8, right column, 2nd

paragraph, lines 19-22).

Claim 10. The method of claim 8, wherein the automatically generating one or more

reliability buffers comprises: associating the activity characteristics value, the activity

relationship value, the activity pre-structured (Allweyer: pg.6, 2nd paragraph) process

model, and the activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph)

model.

Claim 13. The method of claim 12, wherein dynamically updating the DPM project

planning (Mora: abstract, line 6) model to provide an updated DPM project plan (Mora:

abstract, line 6) comprises: automatically generating one or more updated reliability

buffers in association with respective ones of the one or more updated activities,

wherein each updated reliability buffer (Mora: pg.3, left column, 1st paragraph, 2nd line

with pg.7 left column, lines 1-3) has an updated duration value, (Mora: abstract: lines 9-

10) an updated time precedence relationship between the updated reliability buffer and

an upstream activity, and an updated time precedence relationship between the

updated reliability buffer (Mora: pg.3, left column, 1st paragraph, 2nd line with pg.7 left

column, lines 1-3) and an upstream activity, to provide the updated DPM project plan

(Mora: abstract, line 6).

Claim 14. The method of claim 13, wherein automatically generating one or more

updated reliability buffers comprises: associated the updated activity characteristics

value (Mora: pg.2, right column, "Methodology", 2nd paragraph, lines 4-5), the updated

activity relationship value, the activity pre-structured (Allweyer: pg.6, 2nd paragraph)

process model, and the activity relationship pre-structured (Allweyer: pg.6, 2nd

paragraph) model.

10.   Claims 6, 7 and 11, 12, 15 are rejected under 35 U.S.C. 103(a) as obvious by

Allweyer "Model-Based Re-Engineering in the European Construction Industry" (1996)

in view Mehta et al. (US Patent 6,931,365) (hereafter Mehta) and in further of Mora

"Dynamic planning Control Methodology for Design/Build Fast-Track Construction

Projects" (Jan/Feb 2001). Allweyer, Mora and Mehta are analogous art because they all

teach industrial modeling.

Therefore, it would have been obvious to one having ordinary skill in the art at he

time the invention was made to utilize pre-structured model of Allweyer in the

management decision making policies under pre-specified scenarios of Mehta and the

dynamic planning methodology of Mora because Allweyer teaches an efficient way to

reduce the risks of BPR projects and to increase the quality of the results (Allweyer:

pg.5, "Reference Models" section, 2nd paragraph) and for the faster development of new

process structures, and software-specific models for matching them against the new

process model, and selecting and customizing a software system that will support new

processes (Allweyer: pg. 7, lines 5-7); and Mehta teaches "what if" scenarios impacted

simultaneously by technological innovations, political and regulatory changes, business

and economic decisions, and the evolution of consumer preferences due to social and

competitive forces. By playing through those possible alternative scenarios, participants

"experience the future" of both--the strategies as well as the results. By interacting

amongst themselves in these different scenarios, the participants are able to construct

accurate and robust strategies (Mehta: column 2, lines 19-23).

Claim 6.The method of claim 1, further comprising: associating a policy value (Mehta:

column 2, lines 3-4) with the activity pre-structured (Allweyer: pg.6, 2nd paragraph)

process model.

Claim 7. The method of claim 6, wherein associating the first policy value (Mehta:

column 2, lines 3-4) with the activity pre-structured (Allweyer: pg.6, 2nd paragraph)

process model comprises: providing the first policy value as a user-defined first policy

value; associating the first policy (Mehta: column 2, lines 3-4) value with the activity pre-

structured (Allweyer: pg.6, 2nd paragraph) process model.

Claim 11. The method of claim 10, wherein the automatically generating one or more

reliability buffers further comprises: associating the policy (Mehta: column 2, lines 3-4)

value with the activity pre-structured (Allweyer: pg.6, 2nd paragraph) process model,

and the activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model.

Claim 12. The method of claim 8, further comprising: selecting one or more updated activities; providing at least one of updated activity characteristics data (Mora: pg.2, right column, "Methodology", 2nd paragraph, lines 4-5), updated activity relationship date and updated policy (Mehta: column 2, lines 3-4) data associated with the updated activities, to provide an updated DPM project planning (Mora: abstract, line 6) model; and dynamically updating the DPM project planning (Mora: abstract, line 6) model to provide an updated DPM project plan (Mora: abstract, line 6).

Claim 15. The method of claim 14, wherein automatically generating one or more updated reliability buffers comprises further comprises: identifying a similar activity corresponding to a respective one of the one or more updated activities, having similar activity characteristics values, (Mora: pg.2, right column, "Methodology", 2nd paragraph, lines 4-5) similar activity relationship values and similar policy (Mehta: column 2, lines 3-4) values, based upon a similarity criteria; associating the similar activity characteristics (Mora: pg.2, right column, "Methodology", 2nd paragraph, lines 4-5) values, the similar activity relationship values, the similar activity pre-structured (Allweyer: pg.6, 2nd paragraph) process model, and the similar activity relationship pre-structured (Allweyer: pg.6, 2nd paragraph) model; and adjusting the duration values, (Mora: abstract: lines 9-10) the upstream time precedence relationships and the upstream time precedence relationship of the updated reliability buffers (Mora: pg.7, left column, 2nd paragraph, lines 5-6; and pg. right column 2nd paragraph, lines 19-22).

Allowable Subject Matter

11.   Claims 17-22 are allowed.

12.   The following is an examiner's statement of reasons for allowance:

While Mora (claim 17) teaches a dynamic planning apparatus comprising: a dynamic planning method (DPM) provides activity data that is a combination of activity characteristics data, and activity relationship data; Mehta teaches policy data, none of these references, taken either alone or in combination, with the prior art of record disclose

(claim 17) "a DPM processor coupled to the DPM data processor to provide a DPM projected plan,"

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicants' invention defines over the prior art of record.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Paul Rodriguez 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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questions regarding access to the Private PAIR system, contact the Electronic Business

Center (EBC) (toll-free (866-217-9197)).

March 16, 2006

TS

Paul P. Rodriguez

Supervisor Primary Examiner   3/17/06
Art Unit 2125 2123